



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/706,227	11/03/2000	Erling H. Wold	AMC-00-003	6504

7590 11/12/2004  
Timothy A Brisson  
Sierra Patent Group LTD  
PO BOX 6149  
Stateline, NV 89448

EXAMINER	
OPSASNICK, MICHAEL N	
ART UNIT	PAPER NUMBER
2655	

DATE MAILED: 11/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/706,227

Applicant(s)

WOLD ET AL.

Examiner

Michael N. Opsasnick

Art Unit

2655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4, 7-14, 17-24, 26-29, 35-38 and 41-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7-14, 17-24, 26-29, 35-38 and 41-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-4,7-14,17-24,26-29,35-38,41-44 are rejected under 35 U.S.C. 102(e) as being anticipated by Schulze (4918730).

As per claims 1,11,21,35 Schulze (4918730) teaches a method (col. 9 lines 45-55), apparatus (figs. 1-4), and storage medium (col. 4 lines 15-27 -- RAM for storing processing results, and other storage mediums) for creating a signature of sampled work (examiner notes that the claim scope of ‘sampled work’ is an audio signal, applicant’s specification, page 1, and page 3 line 20 – page 4 line 2) in real time comprising receiving a sampled work (as digitizing the audio signal -- col. 4 lines 10-15, 25-34)

“segmenting said sampled work.....segments....hop sizes” as storing time segments of the envelope signal (abstract), wherein the segment is preferably 1.7 seconds and the envelope size has a predetermined range (hop, size, col. 2 lines 42-47)

Art Unit: 2655

“creating a plurality of signatures.....segments.....includes calculations of a plurality of acoustic features.....coefficients” as generating envelop signatures (col. 1 lines 48-55; and a further correlation function → col. 9 lines 28-45)

“storing said sampled work signature” as storing the envelope signature (abstract) .

As per claims 2,22,36, Schulze (4918730) teaches:

“includes the act of .....segment size and hop size” as providing multiple envelope signatures (abstract) .

As per claims 3,12,23,37, Schulze (4918730) teaches said hop size of work signature is less than reference signatures (col. 2 lines 42-47) ,

As per claims 4,13,24,38, Schulze (4918730) teaches calculating envelop features for each segment (col. 7 lines 50-65) ,

As per claims 7,17,26,41, Schulze (4918730) teaches plurality of segments and an identification portion (abstract) .

As per claims 8,10,18,27,42, Schulze (4918730) teaches a segment size of 1.7 seconds (col. 1 lines 52-58),

Art Unit: 2655

As per claims 9,19,28,43, Schulze (4918730) teaches the hop size to be less than 50% of the segment size (Schulze (4918730) teaches a range of 2 Hz to 50 Hz, which is less than 1/1.7 seconds; col. 2 lines 1-2) ,

As per claims 10,20,29,44, Schulze (4918730) teaches a hop size of around .1 seconds (a .1 second hop size corresponds to 10 Hz, which falls in the range of 2-50 Hz, as taught Schulze (4918730), col. 2 lines 1-2).

As per claim 11, Schulze (4918730) also teaches creating multiple reference signatures (as time segments) and comparing a sample of the reference signatures for a match (abstract).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schulze (4918730) in view of Foot (6542869).

Art Unit: 2655

As per claim 14, Schulze (4918730) does not explicitly teach calculating a Euclidean distance between vectors and comparing the result to a threshold, however, Footte (6542869) teaches the calculation of the Euclidean distance (col. 4 lines 55-67; col. 4 lines 45-51), to be used in a vector comparison against a threshold to determine segmentation (col. 8 lines 50-65). Therefore, it would have been obvious to one of ordinary skill in the art of vector measuring to modify the teachings of Schulze (4918730) with using Euclidean distance measuring between two vectors versus a threshold of an audio signal because it would advantageously mark areas of significant change in the audio signal (Footte (6542869), col. 8 lines 43-49).

### ***Response to Arguments***

5. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection. With respect to the arguments that the instant invention uses multiple acoustical features, examiner points to a second calculation that Shulze uses (as noted above in the new grounds of rejection).

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2655

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

**7. Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

(703) 872 9314,

(for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Opsasnick, telephone number (703)305-4089, who is available Tuesday-Thursday, 9am-4pm.

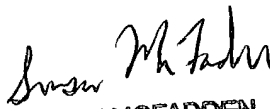
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Doris To, can be reached at (703)305-4827. The facsimile phone number for this group is (703)872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 2600 receptionist whose telephone number is (703) 305-4750, the 2600 Customer Service telephone number is (703) 306-0377.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mno

11/9/2004

  
SUSAN MCFADDEN  
PRIMARY EXAMINER